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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/624,253	WINGER ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-14 and 16-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-14 and 16-24* is/are rejected.

7)☒ Claim(s) *25 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/28/08 has been entered.

2. Applicant's arguments with respect to claims 1-3-14, 16-24 on 8/28/08 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-14, 16-24 are rejected under 35 U.S.C. 103(a) as unpatentable over Au in view of Yuan et al., (hereinafter referred to "Yuan").

Au discloses a method for decoding a bitstream (Au: figures 5-6), comprising the steps of: (A) generating a first signal and a second signal by parsing (Au: column 11, lines 5-10) a common slice containing a plurality of macroblocks in macroblock scan order (Au: column 8, lines 35-40); (B) generating a third signal by entropy decoding said first signal (Au: column 11, lines 10-25); and (C) generating a video signal by combining said second signal and said third

signal (Au: column 10, lines 60-67), as in claim 1. However, Au fails to disclose wherein said plurality of macroblocks switch from non-I PCM mode macroblocks to I PCM mode macroblocks and first and second signal correspondence with non-I PCM and I PCM mode macroblocks, respectively, as in the claim. Yuan discloses a method and an apparatus for scaleable communications and includes a codec for signal parsing including accepting a layered structure (Yuan: column 5, lines 50-67; column 6, lines 1-25) of a video signal containing a plurality of macroblocks (Yuan: column 9, lines 62-67; column 10, lines 1-35), wherein said plurality of macroblocks switch from non-I PCM macroblocks to I PCM mode macroblocks (Yuan: column 11, lines 50-65; column 19, lines 45-67) with a first signal and a second signal correspondence (Yuan: column 19, lines 34-45: forced intraframe refresh) in order to gain a higher compression gain (Yuan: column 11, lines 55-58). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the teaching of Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching into the Au teaching in order to further achieve the advantage of a high compression gain. The Au decoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has all of the features of claim 1.

Regarding claim 3, the Au decoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has renormalizing said entropy decoding by setting any one of a plurality of predetermined values as a last value for said entropy decoding (Au: column 15, lines 60-67; column 16, lines 1-10), as in the claims.

Regarding claim 4, the Au decoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has terminating said entropy

decoding by setting any one of a plurality of predetermined values as a last value for said entropy decoding (Au: column 5, lines 10-15), as in the claim.

Regarding claims 5-6, the Au decoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, discloses comparing an offset value to a range value (Au: column 14, lines 25-61), as in the claims.

Regarding claims 7-8, the Au decoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has the step of demodulating said second signal prior to combining with said third signal (Au: column 11, lines 50-65; column 22, lines 13-45: "demodulating implemented at the decoder to undo the pulse code modulation at the coder), as in the claims.

Au discloses an apparatus (Au: figure 3), comprising: a parser configured to accept a common slice in said bitstream, the common slice containing a plurality of macroblocks in macroblock scan order (Au: column 8, lines 35-40); generate a first signal and a second signal by parsing the common slice in the bitstream (Au: column 11, lines 5-10) a decoder configured to generate a third signal by entropy decoding said first signal (Au: column 11, lines 10-25); and a circuit configured to generate a video signal by combining said second signal and said third signal (Au: column 10, lines 60-67), as in claim 9. However, Au fails to disclose wherein said plurality of macroblocks switch from non-I PCM mode macroblocks to I PCM mode macroblocks and first and second signal correspondence with non-I PCM and I PCM mode macroblocks, respectively, as in the claim. Yuan discloses a method and an apparatus for scaleable communications and includes a codec for signal parsing including accepting a layered structure (Yuan: column 5, lines 50-67; column 6, lines 1-25) of a video signal containing a

plurality of macroblocks (Yuan: column 9, lines 62-67; column 10, lines 1-35), wherein said plurality of macroblocks switch from non-I PCM macroblocks to I PCM mode macroblocks (Yuan: column 11, lines 50-65; column 19, lines 45-67) with a first signal and a second signal correspondence (Yuan: column 19, lines 34-45: forced intraframe refresh) in order to gain a higher compression gain (Yuan: column 11, lines 55-58). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the teaching of Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching into the Au teaching in order to further achieve the advantage of a high compression gain. The Au decoding apparatus, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has all of the features of claim 9.

Regarding claims 10-11, the Au decoding apparatus, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, discloses wherein said entropy decoding discloses wherein said arithmetic decoding comprises a context-based adaptive binary arithmetic coding (Au: column 11, lines 10-25), as in the claims.

Regarding claim 12, the Au decoding apparatus, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, discloses has a demodulator configured to pulse code demodulate said second signal (Au: column 11, lines 50-65; column 22, lines 13-45: "demodulating implemented at the decoder to undo the pulse code modulation at the coder), as in the claim.

Au discloses an apparatus (Au: figure 3), comprising: means for accepting a common slice in said bitstream containing a plurality of macroblocks in macroblock scan order (Au: column 8, lines 35-40); means for generating a first signal and a second signal by parsing (Au:

column 11, lines 5-10) means for generating a third signal by entropy decoding said first signal (Au: column 11, lines 10-25); and means for generating a video signal by combining said second signal and said third signal (Au: column 9, lines 40-50), as in claim 13. However, Au fails to disclose wherein said plurality of macroblocks switch from non-I PCM mode macroblocks to I PCM mode macroblocks and first and second signal correspondence with non-I PCM and I PCM mode macroblocks, respectively, as in the claim. Yuan discloses a method and an apparatus for scaleable communications and includes a codec for signal parsing including accepting a layered structure (Yuan: column 5, lines 50-67; column 6, lines 1-25) of a video signal containing a plurality of macroblocks (Yuan: column 9, lines 62-67; column 10, lines 1-35), wherein said plurality of macroblocks switch from non-I PCM macroblocks to I PCM mode macroblocks (Yuan: column 11, lines 50-65; column 19, lines 45-67) with a first signal and a second signal correspondence (Yuan: column 19, lines 34-45: forced intraframe refresh) in order to gain a higher compression gain (Yuan: column 11, lines 55-58). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the teaching of Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching into the Au teaching in order to further achieve the advantage of a high compression gain. The Au decoding apparatus, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has all of the features of claim 13.

Au discloses a method for encoding a bitstream (Au: column 11, lines 10-32), comprising the steps of: (A) generating a first signal and a second signal by parsing (Au: column 8, lines 65-67; column 9, lines 1-10) a common slice in said bitstream (Au: column 8, lines 35-40); generating a third signal by entropy encoding said first signal (Au: column 10, lines 5-20); and

generating a video signal by combining said second signal and said third signal (Au: column 10, lines 60-67) within a common slice (Au: column 8, lines 35-45), as in claim 14. However, Au fails to disclose wherein said first and second signal correspondence with non-I PCM and I PCM mode macroblocks, respectively, as in the claim. Yuan discloses a method and an apparatus for scaleable communications and includes a codec for signal parsing including accepting a layered structure (Yuan: column 5, lines 50-67; column 6, lines 1-25) of a video signal containing a plurality of macroblocks (Yuan: column 9, lines 62-67; column 10, lines 1-35), wherein said plurality of macroblocks switch from non-I PCM macroblocks to I PCM mode macroblocks (Yuan: column 11, lines 50-65; column 19, lines 45-67) with a first signal and a second signal correspondence (Yuan: column 19, lines 34-45: forced intraframe refresh) in order to gain a higher compression gain (Yuan: column 11, lines 55-58). Accordingly, given this teaching it would have been obvious for one of ordinary skill in the art to incorporate the teaching of Yuan's use of non-I PCM/I PCM coded macroblocks into the Au teaching in order to further achieve the advantage of a high compression gain. The Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks, has all of the features of claim 14.

Regarding claims 16-17, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks, has the step of renormalizing said entropy encoding by setting any one or a plurality of predetermining bit patterns as a last value for said entropy encoding (Au: column 15, lines 60-67; column 16, lines 1-10), as in the claims.

Regarding claim 18, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks, discloses terminating said entropy encoding by setting any one

of a plurality of predetermined values as a last value for said entropy encoding (Au: column 5, lines 10-15), as in the claim.

Regarding claim 19, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has encoding data in said second signal by pulse code modulation (Yuan: column 11, lines 50-60), as in the claim.

Regarding claim 20, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has the steps of: generating a fourth signal and a fifth signal by parsing (Au: column 11, lines 5-10) a common slice in said bitstream (Au: column 8, lines 35-40); generating a sixth signal by entropy decoding said fourth signal (Au: column 11, lines 10-25); and generating a copy of said video signal by combining said fifth signal and said sixth signal (Au: column 10, lines 60-67), as in claim 20.

Regarding claims 21-22, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, has wherein said common slice comprises one or more macroblocks encoded using arithmetic entropy coding, wherein said arithmetic entropy coding comprises context based adaptive binary arithmetic coding (Au: column 11, lines 15-25), and one ore more macroblocks encoded using pulse code modulation (Au: column 11, lines 50-60), as in the claims.

Regarding claim 23, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, is further configured to pulse code demodulate said second signal in a first mode and pass said second signal in a second mode (Au: column 11, lines 50-65; column 22, lines 13-45: "demodulating implemented at the decoder to undo the pulse code modulation at the coder), as in the claim.

Regarding claim 24, the Au encoding method, now incorporating the Yuan's use of non-I PCM/I PCM coded macroblocks and associated switching, is wherein said second signal comprises pulse code modulated (PCM) data (Yuan: column 11, lines 50-60), said third signal comprises arithmetic entropy coded (AC) data (Au: column 11, lines 15-25) and generating said bitstream comprises selecting either said pulse code modulated data or said arithmetic entropy coded data for each macroblock of said common slice (Au: column 8, lines 35-50), as in the claim.

Allowable Subject Matter

5. Claims 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Examiner notes that the three syntax elements specifically recited therein are not anticipated nor obvious over the art of record. Accordingly, if the rejected claims 1-24 are canceled, and claims 25-26 are amended as indicated herein, the application would be placed in a condition for allowance.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Banerji discloses the stitching of video for continuous presence in multipoint video conferencing.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
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November 21, 2008